

**Before the  
Federal Communications Commission  
Washington, D.C. 20554**

In the Matter of	)	
	)	
Technology Transitions Policy Task Force	)	
Request For Comments on Potential Trials	)	GN Docket No. 13-5

**REPLY COMMENTS OF HARRIS CORPORATION**

Harris Corporation (Harris) respectfully submits these reply comments in response to the Federal Communications Commission’s (Commission) Technology Transitions Policy Task Force (Task Force) proposal of a set of potential trials relating to transition from copper to fiber, from wireline to wireless, and from time-division multiplexing (TDM) to internet protocol IP (collectively, transition trials).<sup>1</sup> Harris greatly values the Commission’s focus on this matter and the comments by stakeholders making clear that critical infrastructure and federal stakeholders must be protected in any transition trial.

**I. SUMMARY**

Harris Corporation’s role as the Prime Systems Integrator for the FAA Telecommunications Infrastructure (FTI) Program, which is the primary means through which the FAA acquires the telecommunications services required for the National Airspace System (NAS), offers unique insight into the impact the Commission’s proposed IP transition trials upon mission critical

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<sup>1</sup> See Technology Transitions Policy Task Force Seeks Comment On Potential Trials, GN Docket No. 13-5, Public Notice, (rel. May 10, 2013) (Task Force Trial PN).

communications. As has been established in prior filings, the NAS enables safe and efficient air travel in the United States and over large portions of the world's oceans, and over 92% of the NAS' FTI services continue to be TDM-based.<sup>2</sup> For this reason, a forced IP transition trial poses significant threat of harm to air safety if not conducted in a manner that fully protect existing FTI operations. Harris agrees with the comments of the United States Department of Defense on behalf of all Federal Executive Agencies (DoD/FEA) that FAA's FTI program must be protected from service interruption and cost increases that could result from transition trials. Moreover, Harris is appreciative of comments of AT&T, as a lead proponent of the transition trials, that it will – and all other participants must – take steps to preserve FTI functionality going forward.

Therefore, if the Commission moves ahead on establishing trials as it proposes, it must:

- a) Impose conditions that prevent the elimination of any services and functions currently acquired over TDM technology;
- b) Require seamless operation to FTI; and
- c) Require FAA involvement in any trial planning that could impact FTI operations.

## **II. FEDERAL STAKEHOLDERS AND AT&T SUPPORT PROTECTION OF FAA OPERATIONS IN ANY IP TRANSITION TRIAL**

Numerous stakeholders join Harris in making clear that proposed IP transition trials could negatively impact mission critical systems such as FTI and the safety of the American public.<sup>3</sup>

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<sup>2</sup> See Comments of Harris Corporations, GN Docket No. 12-353, Jan. 25, 2013; *see also* Comments of Harris Corporation, GN Docket No. 13-5, Jul. 8, 2013.

<sup>3</sup> See, e.g., Comments of the Intergovernmental Advisory Committee, GN Docket No 13-5, Jul. 8, 2013, at 1 (noting that, “trial transitions that are contemplated by the FCC [in this docket], unless appropriately monitored and managed, may negatively impact public safety....”). See also Comments of the Telecommunications Industry Association, GN Docket No. 13-5, Jul. 8, 2013, 7-8 (citing the FAA's FTI program in making clear that, “A transition from TDM to IP must protect the public interest furthered by the use of critical infrastructure of TDM

The lead proponents of the IP transition and IP transition trials and the DoD/FEA acknowledge that the Commission should ensure that the FAA's FTI operations – and air travel safety – are not adversely affected by any IP transition plan or trial.

The DoD/FEA comments reinforce that federal operations “continue to rely heavily on wireline TDM-based networks and services and will do so for the foreseeable future.”<sup>4</sup> In fact, the DoD FEA specifically identified the FAA's critical air traffic operations as a program that must be protected,<sup>5</sup> given that “non-TDM services do not provide the functionalities on which the FAA operational system currently relies and that non-TDM services do not extend to many of the FAA's remote locations.”<sup>6</sup> In evaluating the impact of the proposed trials and the IP transition generally, DoD/FEA correctly points out that both planning and substantial unanticipated funding will be required for FTI and all other TDM-reliant government programs should the Commission proceed as proposed.<sup>7</sup>

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services provided by commercial service providers. Many critical infrastructure systems across the nation rely on TDM for services and applications, and these essential functions must be provided an appropriate transition path so that key safety services can continue to function and are not stranded.”).

<sup>4</sup> Comments of the DoD/FEA, GN Docket No 13-5, Jul. 8 2013, at 1.

<sup>5</sup> *See id.* at 3 (noting that the “Federal Aviation Administration (“FAA”), which reportedly relies on TDM technology and services 92% of the time for critical air traffic” is an example of TDM-reliant government programs that support national security interests, public safety, Federal government operations, and military readiness).

<sup>6</sup> *Id.* at 3-4.

<sup>7</sup> *See id.* at 4 (establishing that, “[s]uch a transition would take time to carefully manage and would require significant (often unanticipated and dependent on the Federal budget process) funding in order to upgrade or replace networks and customer premises equipment (e.g., PBXs, handsets, switches, routers, gateways, etc.) and to properly train DoD/FEA personnel in the use and management of the upgraded equipment, networks and services.”).

Concurrently, AT&T has recognized the importance of ensuring the continuation of specialized services.<sup>8</sup> In fact, AT&T has committed to developing solutions in the context of the IP transition trials to protect the FAA's FTI program.<sup>9</sup> Of note with these comments is that there currently are no suitable alternative solutions for the types of TDM services used by FTI today. A wide scale IP trial should not proceed until alternatives are offered and tested to verify their suitability.

Given this support for protecting FTI operations that rely on TDM services and ensure air traffic safety in this nation, careful planning for any transition trial is required to ensure no FTI service impact.

### **III. HARRIS SUPPORTS THE DOD/FEA PROPOSALS TO PROTECT FTI OPERATIONS**

In furtherance of such planning, Harris agrees with AT&T that participants in any transition trial must "explain in detail other information that implicates important public interest considerations" such as the protection of the FAA's FTI program and other critical infrastructure.<sup>10</sup> However, given the absence of specific proposals offering details on aspects of the trial, it is difficult to assess viability of transition trials and their total impact on key mission critical programs. Harris agrees with the National Cable & Telecommunications Association (NCTA) that, "it is imperative that all the parties affected by [transition trial] proposals [are] given an

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<sup>8</sup> Comments of AT&T, GN Docket No 13-5, Jul. 8 2013, 14-15 (calling for plans by trial participants that protect critical infrastructure programs).

<sup>9</sup> *See id.* at 15. FTI stakeholders have met with AT&T representatives to discuss the importance of TDM-based applications for FTI. Harris greatly appreciates AT&T's willingness to collaborate on this vital matter and provide solutions to protect FTI in the IP transition and IP transition trials, and is eager to collectively develop plans to that end.

<sup>10</sup> *Id.* at 14.

opportunity to review the details of those proposals and participate in any formal or informal process through which those proposals are developed and implemented.”<sup>11</sup>

As the Commission and potential trial participants consider concrete plans, Harris urges that the principles espoused by DoD/FEA be applied to the FAA’s FTI program and all other mission critical operations that rely as heavily on TDM services.<sup>12</sup> Specifically, in the event the

Commission proceeds with IP transition planning and trials:

- 1) The FAA’s FTI program should not lose any service functionality as a result of the trial.<sup>13</sup>
- 2) Providers participating in the transition trials must offer full disclosure of the differences between the FAA’s existing wireline services and planned replacement services.<sup>14</sup>
- 3) No trial activity should be allowed that will eliminate FTI services unless it is conclusively demonstrated “that all service functionalities and required characteristics necessary” for FTI operations will be preserved during the trial and after the transition to a new technology.<sup>15</sup>
- 4) Each federal entity that is dependent on TDM services should be involved in the trial selection process to avoid service impacts on critical services and to minimize any cost impacts prior to the start of any trials.

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<sup>11</sup> Comments of NCTA GN Docket No 13-5, Jul. 8 2013, 2.

<sup>12</sup> Comments of the DoD/FEA at 4-6.

<sup>13</sup> *See id.* at 4 (urging the Commission to prevent a “flash cut” for all DoD/FEA programs and making clear that, “the participating local exchange carrier should not be allowed to unilaterally require all customers in the LEC’s service territory trial area to move to a wireless or IP-based product.”).

<sup>14</sup> *See id.* at 5

<sup>15</sup> *Id.*

## IV. CONCLUSION

The record in this proceeding makes it clear that mission critical, TDM-reliant services required by the FAA and many other federal entities must be protected functionally, technically, and financially from all proposed transition trials and transition plans. To ensure such protection, detailed proposals must be issued and considered by the FAA and all stakeholders to ensure that no there will be no service or cost impact and that the trials are done in a manner that keep Americans served by mission critical systems safe.

For the foregoing reasons, Harris urges the Commission to consider the recommendations above as it assesses actions pursuant to this proceeding.

Respectfully submitted,

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August 8, 2013